From: R4LIMS
To: Lattimore, Leigh

Cc: Turner, Nardina; Lkrebs@otie.com; Saskowski, Ronald; gkowalski@otie.com; Wellborn, Floyd; Aker, Sandra

Subject: R4 LIMS Results: Project 19-0482, E193804 TMTL 10 21 19 1436

 Date:
 Monday, October 21, 2019 10:45:18 PM

 Attachments:
 E193804 TMTL FINAL 10 21 19 1436.PDF

E193804 TMTL FINAL 10 21 19 1436 - 19-0482 - WESTSIDE LEAD 10-21-2019.GAN000407160.Dat

On Monday, October 21, 2019, results for the following were released by the Region 4 Laboratory:

Analyses:

Total Metals (TMTL)

Project Number: <u>19-0482</u> Project Name: <u>Westside Lead</u>

City: Atlanta County: Fulton State: GA

These results were reported by:

Floyd Wellborn (E-mail: Wellborn.Floyd@epa.gov)

If you have questions concerning the laboratory results, please feel free to contact the laboratory personnel shown above as having reported the data. We also encourage you to provide feedback to the Region 4 laboratory by filling out our online (*EPA internal network only*) <u>Customer Survey Form</u>.

These results are for the following Sample Type(s):

Soil (Surface Soil)

PDF DATA RESULTS REPORT FILE ATTACHMENT:

An Adobe Acrobat PDF file is attached to this message that contains final results for the analyses as indicated in the data report.

DATA EXPORT FILE ATTACHMENT:

If attached, data export files will be tab delimited ASCII text files contained in a file that has been formatted using the ZIP archiving format (.Dat extension). Please consult your local computer support personnel if you have problems extracting these files. If you have questions about the data file formats and the information contained in these files, or if you would like to request export files for previously reported data, use the contact information shown below to contact the appropriate person with your concerns. To generate export files for previously reported data we'll need the name of the PDF report file that was attached to the original transmittal message.

For questions concerning this message and attachments, or any other LIMS or data reporting issues, please call the LSASD PC Hotline at 706-355-8825 or send an email to r4lims@epa.gov.

SAMPLE DISPOSAL POLICY:

Due to limited space for long term sample storage, LSB's policy is to dispose of

samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov.

CONFIDENTIALITY NOTICE

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

October 21, 2019

MEMORANDUM

SUBJECT: FINAL Analytical Report

Project: 19-0482, Westside Lead

FROM: Floyd Wellborn

LSB Inorganic Chemistry Section Chief

THRU: Sandra Aker, Chief

Laboratory Services Branch

TO: Leigh Lattimore

Attached are the final results for the analytical groups listed below. This report shall not be reproduced except in full without approval of the Region 4 laboratory. These analyses were performed in accordance with the Laboratory Services Branch's Laboratory Operations and Quality Assurance Manual (LSB LOQAM) found at www.epa.gov/region4/sesd/asbsop. Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the LSB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Chapter 5 of the LSB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

| Analyses Included in this report: | Method Used: | Accreditations: | |
|-----------------------------------|------------------|-----------------|---|
| Total Metals (TMTL) | | | _ |
| Total Metals | EPA 200.8 (Soil) | ISO | |
| Total Metals | EPA 6010 (Soil) | ISO | |
| | | | |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Sample Disposal Policy

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These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov.

cc: Nardina Turner



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

SAMPLES INCLUDED IN THIS REPORT

Project: 19-0482, Westside Lead

| Sample ID | Laboratory ID | Matrix | Date Collected | Date Received |
|-----------|---------------|--------------|----------------|---------------|
| WSL-1011C | E193804-01 | Surface Soil | 9/12/19 14:30 | 9/18/19 10:10 |
| WSL-1043A | E193804-02 | Surface Soil | 9/11/19 14:40 | 9/18/19 10:10 |
| WSL-1052A | E193804-03 | Surface Soil | 9/11/19 10:30 | 9/18/19 10:10 |
| WSL-1152C | E193804-04 | Surface Soil | 9/10/19 12:00 | 9/18/19 10:10 |
| WSL-1155B | E193804-05 | Surface Soil | 9/10/19 12:45 | 9/18/19 10:10 |
| WSL-1155C | E193804-06 | Surface Soil | 9/10/19 13:05 | 9/18/19 10:10 |
| WSL-1158C | E193804-07 | Surface Soil | 9/11/19 12:15 | 9/18/19 10:10 |
| WSL-1170B | E193804-08 | Surface Soil | 9/10/19 09:50 | 9/18/19 10:10 |
| WSL-1170C | E193804-09 | Surface Soil | 9/10/19 10:10 | 9/18/19 10:10 |
| WSL-1185A | E193804-10 | Surface Soil | 9/12/19 15:05 | 9/18/19 10:10 |
| WSL-1206B | E193804-11 | Surface Soil | 9/10/19 10:50 | 9/18/19 10:10 |
| WSL-1206C | E193804-12 | Surface Soil | 9/10/19 11:05 | 9/18/19 10:10 |
| WSL-1222B | E193804-13 | Surface Soil | 9/11/19 13:00 | 9/18/19 10:10 |
| WSL-1222C | E193804-14 | Surface Soil | 9/11/19 13:20 | 9/18/19 10:10 |
| WSL-1255B | E193804-15 | Surface Soil | 9/10/19 13:40 | 9/18/19 10:10 |
| WSL-1255C | E193804-16 | Surface Soil | 9/10/19 14:00 | 9/18/19 10:10 |
| WSL-1271A | E193804-17 | Surface Soil | 9/12/19 11:20 | 9/18/19 10:10 |
| WSL-1274A | E193804-18 | Surface Soil | 9/11/19 09:25 | 9/18/19 10:10 |
| WSL-1325B | E193804-19 | Surface Soil | 9/11/19 13:50 | 9/18/19 10:10 |
| WSL-1325C | E193804-20 | Surface Soil | 9/11/19 14:10 | 9/18/19 10:10 |
| WSL-1344B | E193804-21 | Surface Soil | 9/10/19 14:05 | 9/18/19 10:10 |
| WSL-1369B | E193804-22 | Surface Soil | 9/12/19 10:30 | 9/18/19 10:10 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

DATA QUALIFIER DEFINITIONS

| J | The identification of the analyte is acceptable; the reported value is an estimate. |
|------|---|
| QM-1 | Matrix Spike Recovery less than method control limits |

OM-2 Matrix Spike Recovery greater than method control limits

ACRONYMS AND ABBREVIATIONS

CAS Chemical Abstracts Service

Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory.

MDL Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.

MRL Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments.

TIC Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported.

ACCREDITATIONS:

ISO ASB is accredited by ISO/IEC 17025, including an amplification for forensic accreditation through ANSI-ASQ National Accreditation Board.

Refer to the certificate and scope of accreditation AT-1644 at: http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd

NR The EPA Region 4 Laboratory has not requested accreditation for this test.



Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1011C Lab ID: E193804-01
Station ID: WSL1011C Matrix: Surface Soil

Date Collected: 9/12/19 14:30

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 1.8 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 13:52 | EPA 200.8 |
| 7439-92-1 | Lead | 330 | mg/kg dry | 10 | 10/03/19 11:05 | 10/10/19 12:56 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1043A Lab ID: E193804-02
Station ID: WSL1043A Matrix: Surface Soil

Date Collected: 9/11/19 14:40

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 2.7 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 13:56 | EPA 200.8 |
| 7439-92-1 | Lead | 490 J, QM-2 | mg/kg dry | 9.9 | 10/03/19 11:05 | 10/10/19 12:59 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1052A Lab ID: E193804-03
Station ID: WSL1052A Matrix: Surface Soil

Date Collected: 9/11/19 10:30

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 2.7 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 14:06 | EPA 200.8 |
| 7439-92-1 | Lead | 720 | mg/kg dry | 20 | 10/03/19 11:05 | 10/10/19 13:10 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1152C Lab ID: E193804-04
Station ID: WSL1152C Matrix: Surface Soil

Date Collected: 9/10/19 12:00

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 7.2 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 14:10 | EPA 200.8 |
| 7439-92-1 | Lead | 330 | mg/kg dry | 9.9 | 10/03/19 11:05 | 10/10/19 13:14 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1155B

Station ID: WSL1155B

Lab ID: E193804-05

Matrix: Surface Soil

Date Collected: 9/10/19 12:45

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 2.3 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 14:21 | EPA 200.8 |
| 7439-92-1 | Lead | 460 | mg/kg dry | 9.9 | 10/03/19 11:05 | 10/10/19 13:17 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1155C Lab ID: E193804-06
Station ID: WSL1155C Matrix: Surface Soil

Date Collected: 9/10/19 13:05

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 8.3 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 14:24 | EPA 200.8 |
| 7439-92-1 | Lead | 440 | mg/kg dry | 10 | 10/03/19 11:05 | 10/10/19 13:21 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1158C Lab ID: E193804-07
Station ID: WSL1158C Matrix: Surface Soil

Date Collected: 9/11/19 12:15

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 8.3 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 14:28 | EPA 200.8 |
| 7439-92-1 | Lead | 390 | mg/kg dry | 9.9 | 10/03/19 11:05 | 10/10/19 13:24 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1170B

Station ID: WSL1170B

Matrix: Surface Soil

Date Collected: 9/10/19 9:50

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 2.7 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 14:32 | EPA 200.8 |
| 7439-92-1 | Lead | 770 | mg/kg dry | 10 | 10/03/19 11:05 | 10/10/19 13:28 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1170C Lab ID: E193804-09
Station ID: WSL1170C Matrix: Surface Soil

Date Collected: 9/10/19 10:10

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 3.8 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 14:35 | EPA 200.8 |
| 7439-92-1 | Lead | 410 | mg/kg dry | 5.9 | 10/03/19 11:05 | 10/10/19 13:31 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1185A Lab ID: E193804-10
Station ID: WSL1185A Matrix: Surface Soil

Date Collected: 9/12/19 15:05

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 6.4 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 14:39 | EPA 200.8 |
| 7439-92-1 | Lead | 430 | mg/kg dry | 9.9 | 10/03/19 11:05 | 10/10/19 13:35 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1206B Lab ID: E193804-11
Station ID: WSL1206B Matrix: Surface Soil

Date Collected: 9/10/19 10:50

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 2.1 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 14:42 | EPA 200.8 |
| 7439-92-1 | Lead | 280 | mg/kg dry | 9.9 | 10/03/19 11:05 | 10/10/19 13:46 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1206C Lab ID: E193804-12
Station ID: WSL1206C Matrix: Surface Soil

Date Collected: 9/10/19 11:05

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 5.3 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 14:46 | EPA 200.8 |
| 7439-92-1 | Lead | 540 | mg/kg dry | 9.8 | 10/03/19 11:05 | 10/10/19 13:49 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1222B

Station ID: WSL1222B

Matrix: Surface Soil

Date Collected: 9/11/19 13:00

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 3.1 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 14:50 | EPA 200.8 |
| 7439-92-1 | Lead | 310 | mg/kg dry | 9.9 | 10/03/19 11:05 | 10/10/19 13:53 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1222C Lab ID: E193804-14
Station ID: WSL1222C Matrix: Surface Soil

Date Collected: 9/11/19 13:20

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 2.7 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 14:53 | EPA 200.8 |
| 7439-92-1 | Lead | 370 | mg/kg dry | 10 | 10/03/19 11:05 | 10/10/19 13:56 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1255B

Station ID: WSL1255B

Matrix: Surface Soil

Date Collected: 9/10/19 13:40

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 5.1 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 15:04 | EPA 200.8 |
| 7439-92-1 | Lead | 550 | mg/kg dry | 20 | 10/03/19 11:05 | 10/10/19 14:00 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1255C Lab ID: E193804-16
Station ID: WSL1255C Matrix: Surface Soil

Date Collected: 9/10/19 14:00

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 4.8 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 15:08 | EPA 200.8 |
| 7439-92-1 | Lead | 380 | mg/kg dry | 9.9 | 10/03/19 11:05 | 10/10/19 14:03 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1271A Lab ID: E193804-17
Station ID: WSL1271A Matrix: Surface Soil

Date Collected: 9/12/19 11:20

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 2.8 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 15:11 | EPA 200.8 |
| 7439-92-1 | Lead | 350 | mg/kg dry | 9.8 | 10/03/19 11:05 | 10/10/19 14:07 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1274A

Station ID: WSL1274A

Matrix: Surface Soil

Date Collected: 9/11/19 9:25

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 2.8 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 15:15 | EPA 200.8 |
| 7439-92-1 | Lead | 260 | mg/kg dry | 10 | 10/03/19 11:05 | 10/10/19 14:10 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1325B

Station ID: WSL1325B

Lab ID: E193804-19

Matrix: Surface Soil

Date Collected: 9/11/19 13:50

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 1.0 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 15:18 | EPA 200.8 |
| 7439-92-1 | Lead | 380 | mg/kg dry | 20 | 10/03/19 11:05 | 10/10/19 14:14 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1325C Lab ID: E193804-20
Station ID: WSL1325C Matrix: Surface Soil

Date Collected: 9/11/19 14:10

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 2.0 | mg/kg dry | 0.20 | 10/03/19 13:38 | 10/15/19 15:22 | EPA 200.8 |
| 7439-92-1 | Lead | 290 J, QM-1 | mg/kg dry | 20 | 10/03/19 11:05 | 10/10/19 14:18 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1344B

Station ID: WSL1344B

Matrix: Surface Soil

Date Collected: 9/10/19 14:05

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 2.6 | mg/kg dry | 0.20 | 10/04/19 10:39 | 10/15/19 15:54 | EPA 200.8 |
| 7439-92-1 | Lead | 310 | mg/kg dry | 9.9 | 10/04/19 10:38 | 10/10/19 14:49 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals

Project: 19-0482, Westside Lead

Sample ID: WSL-1369B Lab ID: E193804-22
Station ID: WSL1369B Matrix: Surface Soil

Date Collected: 9/12/19 10:30

| CAS Number | Analyte | Results Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|---------------|---------|--------------------|-----------|------|-------------------|-------------------|-----------|
| 7440-38-2 | Arsenic | 5.8 | mg/kg dry | 0.20 | 10/04/19 10:39 | 10/15/19 15:58 | EPA 200.8 |
| 7439-92-1 | Lead | 810 J, QM-1 | mg/kg dry | 9.9 | 10/04/19 10:38 | 10/10/19 14:57 | EPA 6010 |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals (TMTL) - Quality Control US-EPA, Region 4, LSASD

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-------------------------------------|--------|--------------------|-----------|---------------------------------------|------------------|-------------|----------------|------|--------------|-------------|
| Batch 1910010 - M 200.2 Metals Soil | | | | | | | | | | |
| Blank (1910010-BLK1) | | | | Prepared: | 10/03/19 An | nalyzed: 10 | /10/19 | | | |
| EPA 6010 | | | | | | | | | | |
| Lead | U | 2.0 | mg/kg dry | | | | | | | U |
| Blank (1910010-BLK2) | | | | Prepared: | 10/03/19 An | nalyzed: 10 | /10/19 | | | |
| EPA 6010 | | | | | | | | | | |
| Lead | U | 2.0 | mg/kg dry | | | | | | | U |
| LCS (1910010-BS1) | | | | Prepared: | 10/03/19 An | nalyzed: 10 | /10/19 | | | |
| EPA 6010 | | | | | | | | | | |
| Lead | 98.107 | 2.0 | mg/kg dry | 100.00 | | 98.1 | 85-115 | | | |
| Matrix Spike (1910010-MS1) | Sou | rce: E193804 | -02 | Prepared: 10/03/19 Analyzed: 10/10/19 | | | | | | |
| EPA 6010 | | | | | | | | | | |
| Lead | 680.34 | 9.9 | mg/kg dry | 98.658 | 491.73 | 191 | 75-125 | | | QM-2 |
| Matrix Spike (1910010-MS2) | Sou | rce: E193804 | -20 | Prepared: 10/03/19 Analyzed: 10/10/19 | | | | | | |
| EPA 6010 | | | | | | | | | | |
| Lead | 374.36 | 20 | mg/kg dry | 99.522 | 291.21 | 83.5 | 75-125 | | | |
| Matrix Spike Dup (1910010-MSD1) | Sou | rce: E193804 | -02 | Prepared: 10/03/19 Analyzed: 10/10/19 | | | | | | |
| EPA 6010 | | | | | | | | | | |
| Lead | 665.57 | 9.9 | mg/kg dry | 98.814 | 491.73 | 176 | 75-125 | 2.19 | 20 | QM-2 |
| Matrix Spike Dup (1910010-MSD2) | Sou | rce: E193804 | -20 | Prepared: 10/03/19 Analyzed: 10/10/19 | | | | | | |
| EPA 6010 | | | | | | | | | | |
| Lead | 359.24 | 20 | mg/kg dry | 99.582 | 291.21 | 68.3 | 75-125 | 4.12 | 20 | QM-1 |
| MRL Verification (1910010-PS1) | | | | Prepared: 10/03/19 Analyzed: 10/10/19 | | | | | | |
| EPA 6010 | | | | | | | | | | |
| Lead | 1.9490 | 2.0 | mg/kg dry | 2.0000 | | 97.4 | 70-130 | | | MRL-3, U |
| D-4-1-1010011 M 200 2 M (-1 C 2 | | | | | | | | | | |
| Batch 1910011 - M 200.2 Metals Soil | | | | Prepared | 10/03/19 An | nalwzed: 10 | 1/15/19 | | | |
| Blank (1910011-BLK1) EPA 200.8 | | | | r repared: | 10/03/19 AI | iaiyzeu. 10 | 113/13 | | | |
| Arsenic | U | 0.10 | mg/kg dry | | | | | | | τ |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700 D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals (TMTL) - Quality Control US-EPA, Region 4, LSASD

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|--|--------------------|--------------------|-----------|---------------------------------------|------------------|------------|----------------|--------|--------------|-------|
| Batch 1910011 - M 200.2 Metals Soil | | | | | | | | | | |
| Blank (1910011-BLK2) | | | | Prepared: 1 | 0/03/19 An | alyzed: 10 | /15/19 | | | |
| EPA 200.8 Arsenic | U | 0.10 | mg/kg dry | | | | | | | U |
| LCS (1910011-BS1) | | | | Prepared: 1 | 10/03/19 An | alyzed: 10 | /15/19 | | | |
| EPA 200.8 Arsenic | 50.084 | 1.2 | mg/kg dry | 50.000 | | 100 | 85-115 | | | |
| Matrix Spike (1910011-MS1) | Sou | rce: E193804 | -02 | Prepared: 1 | 10/03/19 An | alyzed: 10 | /15/19 | | | |
| EPA 200.8 Arsenic | 43.930 | 1.2 | mg/kg dry | 49.329 | 2.6831 | 83.6 | 70-130 | | | |
| Matrix Spike (1910011-MS2) | Source: E193804-20 | | | Prepared: 10/03/19 Analyzed: 10/15/19 | | | | | | |
| EPA 200.8 Arsenic | 41.299 | 1.2 | mg/kg dry | 49.761 | 2.0120 | 79.0 | 70-130 | | | |
| Matrix Spike Dup (1910011-MSD1) | Sou | rce: E193804 | -02 | Prepared: 1 | 10/03/19 An | | | | | |
| EPA 200.8 Arsenic | 43.956 | 1.2 | mg/kg dry | 49.407 | 2.6831 | 83.5 | 70-130 | 0.0590 | 20 | |
| Matrix Spike Dup (1910011-MSD2) | Sou | rce: E193804 | -20 | Prepared: 1 | 10/03/19 An | alyzed: 10 | /15/19 | | | |
| EPA 200.8 Arsenic | 41.586 | 1.2 | mg/kg dry | 49.791 | 2.0120 | 79.5 | 70-130 | 0.692 | 20 | |
| MRL Verification (1910011-PS1) | | | | Prepared: 10/03/19 Analyzed: 10/15/19 | | | | | | |
| EPA 200.8 Arsenic | 0.10772 | 0.10 | mg/kg dry | 0.10000 | | 108 | 65-135 | | | MRL-3 |
| Batch 1910017 - M 200.2 Metals Soil | | | | | | | | | | |
| Blank (1910017-BLK1) | | | | Prepared: 10/04/19 Analyzed: 10/10/19 | | | | | | |
| EPA 6010 Lead | U | 2.0 | mg/kg dry | | | | | | | U |
| Blank (1910017-BLK2) | | | | Prepared: 1 | 10/04/19 An | alyzed: 10 | /10/19 | | | |
| EPA 6010 Lead | U | 2.0 | mg/kg dry | 3 20 | | | | | | U |

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals (TMTL) - Quality Control US-EPA, Region 4, LSASD

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|-------------------------------------|--------------------|--------------------|-----------|----------------|------------------|-------------|----------------|--------|--------------|-------|
| Batch 1910017 - M 200.2 Metals Soil | | | | | | | | | | |
| LCS (1910017-BS1) | | | | Prepared: | 10/04/19 Aı | nalyzed: 10 | 0/10/19 | | | |
| EPA 6010 Lead | 99.292 | 2.0 | mg/kg dry | 100.00 | | 99.3 | 85-115 | | | |
| Matrix Spike (1910017-MS1) | Sou | ırce: E193804 | -22 | Prepared: | 10/04/19 A1 | nalyzed: 10 | 0/10/19 | | | |
| EPA 6010 Lead | 868.07 | 10 | mg/kg dry | 99.681 | 805.42 | 62.9 | 75-125 | | | QM-l |
| Matrix Spike Dup (1910017-MSD1) | Sou | ırce: E193804 | l-22 | Prepared: | 10/04/19 Aı | nalyzed: 10 | 0/10/19 | | | |
| EPA 6010 Lead | 899.53 | 10 | mg/kg dry | 99.860 | 805.42 | 94.2 | 75-125 | 3.56 | 20 | |
| MRL Verification (1910017-PS1) | | | | Prepared: | | | | | | |
| EPA 6010 Lead | 2.0889 | 2.0 | mg/kg dry | 2.0000 | | 104 | 70-130 | | | MRL-3 |
| Batch 1910018 - M 200.2 Metals Soil | | | | | | | | | | |
| Blank (1910018-BLK1) | | | | Prepared: | 10/04/19 A1 | nalyzed: 10 | 0/15/19 | | | |
| EPA 200.8 Arsenic | U | 0.10 | mg/kg dry | | | | | | | t |
| Blank (1910018-BLK2) | | | | Prepared: | | | | | | |
| EPA 200.8 Arsenic | U | 0.10 | mg/kg dry | • | | • | | | | U |
| LCS (1910018-BS1) | | | | Prepared: | 10/04/19 Aı | nalyzed: 10 | 0/15/19 | | | |
| EPA 200.8 Arsenic | 47.485 | 1.2 | mg/kg dry | 50.000 | | 95.0 | 85-115 | | | |
| Matrix Spike (1910018-MS1) | Source: E193804-22 | | | Prepared: | | | | | | |
| EPA 200.8 Arsenic | 50.772 | 1.2 | mg/kg dry | 49.841 | 5.7729 | 90.3 | 70-130 | | | |
| Matrix Spike Dup (1910018-MSD1) | Source: E193804-22 | | | Prepared: | 10/04/19 Aı | | | | | |
| EPA 200.8 Arsenic | 50.757 | | mg/kg dry | 49.930 | 5.7729 | 90.1 | 70-130 | 0.0300 | 20 | |

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Total Metals (TMTL) - Quality Control US-EPA, Region 4, LSASD

Spike

Source

%REC

RPD

| Analyte | Result | Limit | Units | Level | Result | %REC | Limits | RPD | Limit | Notes | | |
|-------------------------------------|---------------------------------------|-------|-----------|---------|--------|------|--------|-----|-------|-------|--|--|
| Batch 1910018 - M 200.2 Metals Soil | | | | | | | | | | | | |
| MRL Verification (1910018-PS1) | Prepared: 10/04/19 Analyzed: 10/15/19 | | | | | | | | | | | |
| EPA 200.8 | | | | | | | | | | | | |
| Arsenic | 0.11484 | 0.10 | mg/kg dry | 0.10000 | | 115 | 65-135 | | | MRL-3 | | |

Reporting

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Region 4 Laboratory Services and Applied Science Division 980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 19-0482

Project: 19-0482, Westside Lead - Reported by Floyd Wellborn

Notes and Definitions for QC Samples

U The analyte was not detected at or above the reporting limit.

MRL-3 MRL verification for Soil matrix

QM-1 Matrix Spike Recovery less than method control limits
QM-2 Matrix Spike Recovery greater than method control limits

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